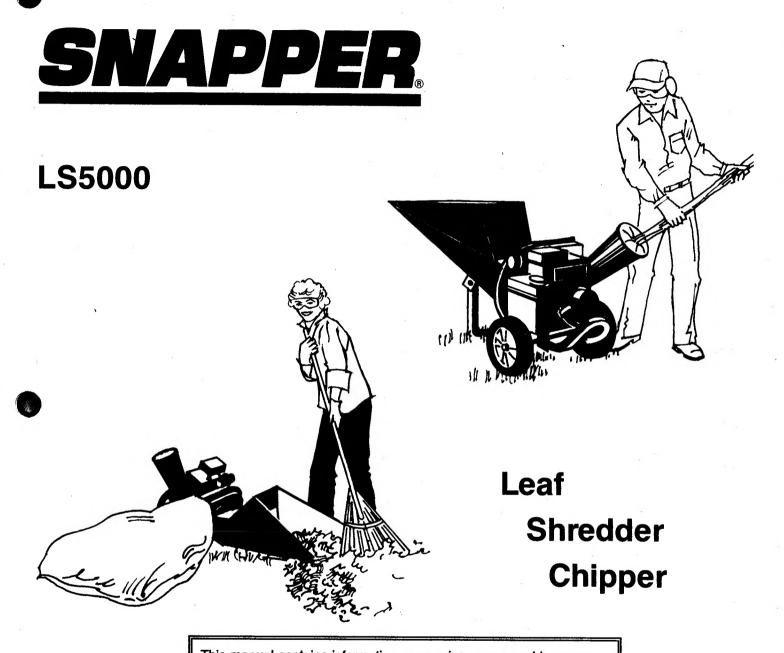
## Safety Instructions and Operations Manual For



This manual contains information concerning proper and improper operating procedures, warnings, maintenance, trouble shooting, assembly, tips. Everyone who operates this machine should read these instructions and be thoroughly familiar with them.

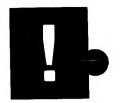
THIS MACHINE IS CAPABLE OF INFLICTING SERIOUS INJURY IF OPERATED IMPROPERLY - READ WARNING AND CAUTION LABELS

SNAPPER \* 1189 Old Schuylkill Road \* P.O. Box 111 \* Parker Ford, PA 19457-0111 PHONE: (610) 495-7181 \* \* \* FAX: (610) 495-5951



## WARNING

### **RULES FOR SAFE OPERATION**



THIS MACHINE IS CAPABLE OF INFLICTING SERIOUS INJURY IF OPERATED IMPROPERLY—READ WARNINGS & CAUTION.

#### TRAINING AND PREPARATION

Before operating this leaf shredder-chipper, read and understand this manual completely. Become familiar with it for your own safety. Failure to do so may cause serious injury. Do not allow anyone to operate your machine who has not read this manual.

#### INTENDED USE

**Never** use your leaf shredder-chipper for any other purpose than shredding and chipping yard gardening products. It is designed for this use and any other use may cause injury.



# **DANGER**



**DANGER:** 

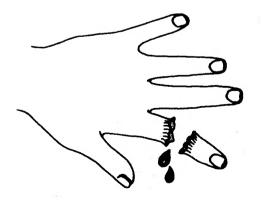
Rotating cutting blades.

Keep hands and feet out of discharge opening while machine is running.

**DANGER:** 

Rotating cutting blades.

Keep hands out of inlet opening while machine is running.





DANGER:

This machine can CRUSH, GRIND, CUT, and SEVER parts of your body if they enter the inlet or discharge area of your leaf shredder-chipper.

#### **SAFETY RULES**



WARNING: TO REDUCE THE POTENTIAL FOR ANY INJURY, COMPLY WITH THE FOLLOWING SAFETY INSTRUCTIONS. FAILURE TO COMPLY WITH THE INSTRUCTIONS MAY RESULT IN PERSONAL INJURY.

#### **TRAINING**

Read this owner's manual carefully in its entirety before attempting to assemble or operate this machine. Be completely familiar with the controls and the proper use of this machine before operating it. Keep this manual in a safe place for future and regular reference and for ordering replacement parts.

#### **OPERATOR'S RESPONSIBILITY**

Never allow children to operate your leaf shredder-chipper, nor adults lacking the proper instructions. Keep children, pets, and bystanders a minimum of 20 feet away from your work area. Flying chips can be hazardous.

**Never** run this machine in an enclosed area since the exhaust from the engine contains monoxide which is an odorless, tasteless, and deadly poisonous gas.

Never run this machine on cement or blacktop. This machine should be operated ONLY on a level earthen surface.

Never put your hands, feet, face, or any other part of your body in the feed hopper or discharge area.

Never remove the rubber shield attached to the shredding hopper or discharge. This device prevents flyback and must be intact at all times. This is a protective guard.

**Never** operate your leaf shredder-chipper while under the influence of alcohol, drugs, or medication. A clear mind is essential for safety.

Never allow a person who is tired or otherwise not alert to operate this machine.

#### SAFETY WEAR

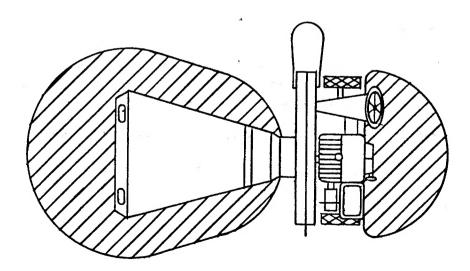
**Never** wear loose clothing or jewelry that can be caught by moving parts of your leaf shredder-chipper and pull you into it. Keep all clothing away from moving parts. Wear proper head gear to keep hair away from moving parts.

Always wear safety glasses provided with your unit and work gloves at all times while operating your leaf shredder-chipper. A chip could fly out and hit you in the eye. Be sure your glasses fit properly and your gloves do not have loose cuffs or draw strings.

Always wear ear protectors at all times while operating your leaf shredder-chipper. The noise of this machine could result in hearing loss.

#### **OPERATING PROCEDURE**

Only operate your leaf shredder-chipper from the operator zone.



OPERATOR ZONES

Know how to turn the unit off.

Never clear discharge area with hands, feet, or any other part of your body.

**Never** clear discharge area while unit is running. After leaf shredder-chipper is shut off, then use a long handle tool to clear area.

Never move your leaf shredder-chipper or leave it unattended with the engine running.

#### OPERATE IN SAFE ENVIRONMENT

**Never** operate your leaf shredder-chipper on slippery, wet, muddy, or icy surfaces. Safe footing is essential in preventing accidents.

Only operate on level ground. If level ground is impossible to find, be sure the leaf tray is "up hill" to assure proper engine lubrication as shown.

Keep operator zone clean and clear of debris so that you don't stumble over it.

HANDLE GASOLINE WITH CARE as it is an extremely flammable fuel.

Check the fuel before starting the engine. Do not fill the fuel tank indoor, while the engine is running, or while the engine is still hot. Turn the unit off and let the engine cool before refueling.

Fuel your leaf shredder-chipper in a clean area to avoid getting dirt in gas tank. Do not smoke while refueling.

Fuel tank cap must be secure at all times except during refueling.

Avoid spilling gasoline or oil. Wipe the unit clean of any spilled fuel or oil.

Store fuel and oil in approved containers, away from heat or open flame, and out of reach of children.

#### REPAIR AND MAINTENANCE SAFETY

**Never** operate your leaf shredder-chipper in poor mechanical condition or when in need of repair. Periodically check that all nuts, bolts and screws are tightened to specifications. Be sure all safety guards and shields are in the proper position. These safety devices are for your protection.

Don't service or repair your leaf shredder-chipper without removing the spark plug wire.

Replace old, damaged or worn parts such as bolts or guards immediately.

Follow engine owners manual for engine maintenance and repair.

If it is necessary for any reason to inspect or repair the hopper or any part of the machine where a moving part can come in contact with your body or clothing, stop the machine, allow it to cool, disconnect the spark plug wire from the spark plug and move it away from the spark plug before attempting such inspection or repair.

#### **OPERATION**

Whenever you operate your leaf shredder-chipper, wearing gloves and safety glasses is required. If necessary to push material into shredding chamber, use a wood stick, never hands or steel implements. At the end of this section we offer additional cautions. Read and observe them.



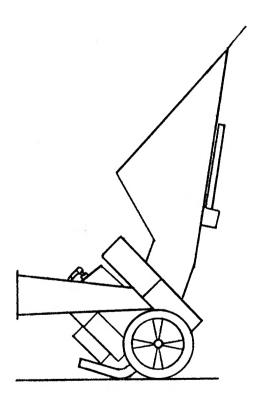
The operation of any leaf shredder-chipper can result in foreign objects being thrown into the eyes, which can result in severe eye damage. Always wear the safety glasses provided with the leaf shredder-chipper or eye shields before chipping or shredding, or while performing any adjustments or repairs.

Branches are fed into the chipper chute for chipping . . . one at a time if they are thicker than 1"; several together if of smaller diameter. Since the throat opening is 3", some side shoots or side branches may have to be trimmed from the main stalk before chipping. Short stubs of branches may be pushed through the chipper section with the next branch. Never assume you know where the blade is and try to push short branches in by hand. You don't know where it is. Be safe, keep your hands away from the chipping blade.

- (1) When feeding material into this equipment be careful that pieces of metal, glass,rocks, cans or other non-organic or foreign objects are not included.
- (2) When shredding newspaper only shred on sheet at a time. Putting entire sections in could damage the rotor.
- (3) Do not allow an accumulation of processed material to build up under the discharge of the leaf shredder-chipper as this can prevent following shredded material to discharge and will result in clogging. Use a long handled stick or spade to remove processed material build-up. DO NOT USE YOUR HAND OR FOOT. Always shut the unit off before clearing build-up. Empty the bag often.
  - (4) Never allow your hands or any part of your body or clothing inside the feed hopper or discharge area of the leaf shredder-chipper. Use a wooden stick to push material down the hopper.
  - (5) Keep all protective guards on the machine in place and in good working condition.
  - (6) Always stand clear of the discharge area when the shredder is running.
  - (7) Keep your face and body away from the feed hopper to avoid being struck by any material that may bounce back. Do not overreach, keep proper balance and footing.
  - (8) Do not transport the shredder while the engine is running.
  - (9) Do not refuel the engine while it is hot, warm, or running.
  - (10) Do not cover the machine while the muffler is still hot.
  - (11) The engine must be kept clear of debris and other accumulations.

**WARNING:** This unit is equipped with aninternal combustion engine and should not be used on or near any unimproved forest-covered, brush-covered or grass-covered land unless the engine's exhaust system is equipped with a spark arrester meeting applicable local or state laws (if any). If a spark arrester is used, it should be maintained in effective working order by the operator.

In the State of California, the above is required by law (Section 4442 of the California Public Resources Code). Other states may have similar laws. Federal laws apply on federal lands. A spark arrester for the muffler is available through your Briggs & Stratton servicing dealer.



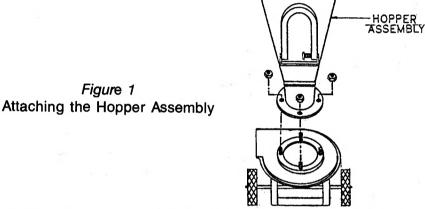
NEVER OPERATE MACHINE IN THIS POSITION.

#### ASSEMBLY INSTRUCTIONS MODEL LS5000

Your leaf shredder-chipper has been shipped with the basic unit completely assembled, leaving only the discharge cover and hopper assembly. Before beginning assembly, make sure all parts have been received and are in good condition. If there are shortages or damages, file a claim with the delivery company immediately. (NOTE: In the following instructions, the "item" number refers to the part number on page 16. Also note for exact hardware sizes, check the parts list on page 17. Pages 16 and 17 will help prevent any incorrect use of hardware in assembly.

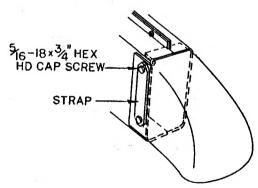
#### **HOW TO SET UP YOUR LEAF SHREDDER-CHIPPER**

MAKE CERTAIN THE SPARK PLUG WIRE IS DISCONNECTED AND MOVED AWAY FROM THE SPARK PLUG BEFORE ASSEMBLING THE LEAF SHREDDER-CHIPPER.



- (1) Remove the basic unit, hopper assembly and discharge cover from the carton.
- (2) Tilt basic unit up onto front bumper.
- (3) Place hopper assembly onto the four threaded studs and secure in place with four lock nuts provided. Tighten securely. Be careful not to over-tighten. Over-tightening will break off the stud.

Figure 2 Attaching the Discharge Cover



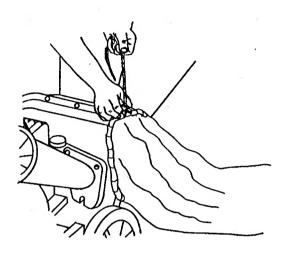
- (1) Lower kick stand and put entire unit into upright position.
- Install one side of discharge cover at a time by inserting a 5/16"-18 x 3/4" hex head screw through the black metal strap and through the rubber discharge cover and tighten. Be sure the grooved side of rubber discharge is to the inside.
- Repeat step 2 with bottom screw.
- Push top tab of rubber discharge cover inside metal housing.
- Continue to wrap discharge cover around and line up two remaining holes. Insert hex head screws through black metal strap and rubber discharge cover and tighten securely.

#### ATTACHING THE CATCHER BAG

Your leaf shredder-chipper is equipped with a catcher bag to catch the shredded material.

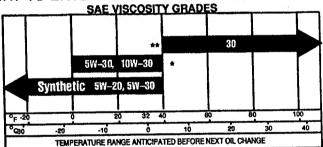
To attach the bag, place the opening of the bag over the rubber discharge cover so it completely covers the chute opening. Depress the plunger on the drawstring, pull on the drawstring until the bag is tight around the chute opening. Release plunger to lock it into position. See figure 3.

Figure 3



## **BEFORE STARTING Gas and Oil Fill-up**

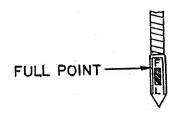
NOTE: ENGINE IS SHIPPED WITHOUT OIL. FILL CRANKCASE WITH OIL BEFORE STARTING. BE VERY CAREFUL NOT TO ALLOW DIRT TO ENTER THE ENGINE WHEN CHECKING OR ADDING OIL OR FUEL.



Temperature range expected before next oil change. All oils must be A.P.I. service classification SE, SF, or SG.

Fill engine with oil as follows. Remove engine oil fill plug. See figure 4. With leaf shredder-chipper level, use a funnel to fill engine with oil to the "full" point on the dipstick. CAPACITY IS 1-1/4 PINTS. Tilt leaf shredder-chipper toward the left (from behind the hopper), then re-level. Check oil level. Refill to point of "full" on the dipstick. Replace oil fill plug and tighten.

Figure 4



Remove fuel cap and fill fuel tank. See figure 5. Use fresh, clean, unleaded automotive gasoline. CAPACITY IS THREE QUARTS. Replace fuel cap.



WARNING: DO NOT FILL CLOSER THAN 1/2 INCH OF TOP OF FUEL TANK TO PREVENT SPILLS AND TO ALLOW FOR FUEL EXPANSION. IF GASOLINE IS ACCIDENTLY SPILLED, MOVE LEAF SHREDDER-CHIPPER AWAY FROM AREA OF SPILL. AVOID CREATING ANY SOURCE OF IGNITION UNTIL GASOLINE VAPORS HAVE DISAPPEARED.

**CAUTION:** Experience indicates that alcohol blended fuels (called gasohol or using ethanol or methanol) can attract moisture which leads to separation and formation of acids during storage. Acidic gas can damage the fuel system of an engine while in storage. To avoid engine problems, the fuel system should be empty before storage for 30 days or longer. Refer to "Storage" section of this manual for details. Use fresh fuel each season.

Never use engine or carburetor cleaner products in the fuel tank or permanent damage may result.

**NOTE:** USE CLEAN OIL AND FUEL. STORE IN APPROVED, CLEAN, COVERED CONTAINERS. USE CLEAN FILL FUNNELS.

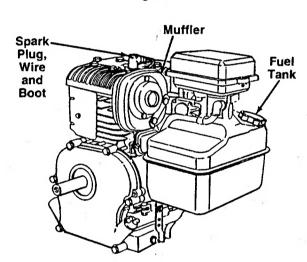


Figure 5

#### TO START ENGINE



WARNING: BE SURE NO ONE OTHER THAN THE OPERATOR IS STANDING NEAR THE LEAF SHREDDER-CHIPPER WHILE STARTING OR OPERATING.

DO NOT OPERATE THIS LEAF SHREDDER-CHIPPER UNLESS THE DISCHARGE COVER HAS BEEN PROPERLY INSTALLED AND IS SECURED WITH THE HARDWARE PROVIDED.

- (1) Attach spark plug wire and rubber boot to spark plug. See figure 5.
- (2) Place the throttle control lever in FAST position.
- (3) Move choke lever to CHOKE position.

- (4) Grasp starter handle and pull rope out slowly until engine reaches start of compression cycle (rope will pull slightly harder at this point). Let the rope rewind slowly.
- (5) Pull rope with a rapid, continuous, full arm stroke. Keep a firm grip on starter handle. Let rope rewind slowly. Do not let starter handle snap back against starter.
- (6) Repeat procedure until engine fires. When engine starts, move choke lever on engine halfway between CHOKE and RUN.

NOTE: If engine does not fire after three attempts, move choke lever halfway between CHOKE and RUN position and try again.

- (7) Move throttle control to IDLE position for a few minutes warm-up. Move choke lever to RUN position as engine warms up.
- (8) Put the throttle in the FAST position or wide open when chipping or shredding.

#### TO STOP ENGINE

- Move throttle control lever to STOP position.
- Disconnect spark plug wire and move away from spark plug to prevent accidental starting while equipment is unattended.

#### HOW TO USE YOUR LEAF SHREDDER-CHIPPER

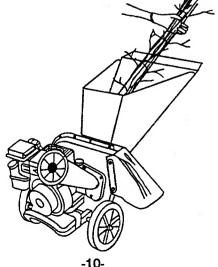
The leaf shredder-chipper is designed for three different methods of operation:



WARNING: THE LEAF SHREDDER-CHIPPER DISCHARGES MATERIALS WITH CON-SIDERABLE VELOCITY. KEEP AWAY FROM THE AREA AROUND THE DISCHARGE COVER. ALWAYS STOP THE ENGINE AND DISCONNECT THE SPARK PLUG WIRE WHEN REMOVING OR ATTACHING THE BAG, WHEN CHANGING CONTAINERS, OR WHEN REMOVING THE SHREDDED MATERIAL. WEAR SAFETY GLASSES AND GLOVES WHENEVER USING YOUR LEAF SHREDDER-CHIPPER.

Leaves and small branches can be fed into the hopper assembly when it is in the upright or lowered position. See figure 6. If it becomes necessary to push material into the leaf shredder-chipper, use a small diameter stick— NOT YOUR HANDS. The stick should be small enough that it will be ground up if it gets into the tri-lobe blade assembly.

Figure 6

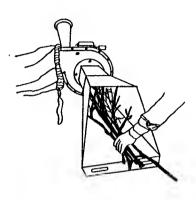


Leaves and small twigs can be raked into the hopper assembly when the machine is in the lowered position. See figure 7. Small branches can also be fed into the hopper assembly in this position. See figure 8.

Figure 7



Figure 8

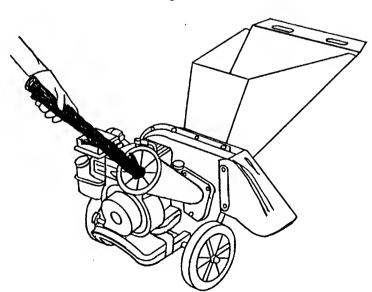


To lower the hopper assembly, grasp the handles at the top of the hopper assembly and push forward and down. The kick stand will automatically fold up and out of the way. Rest the hopper on the ground.

Bulky material, such as stalks or heavy branches (anything over 1/2" diameter, up to 3" in diameter), should be fed into the chipper chute. See figure 9.

#### DO NOT USE THE CHIPPER TUBE WHEN UNIT IS IN THE DOWN POSITION!

Figure 9



IMPORTANT: There is a screen located inside the housing in the discharge area. If the screen becomes clogged, stop the machine, disconnect the spark plug wire from the spark plug, and remove and clean as instructed in the Maintenance section on page 12.

#### **MAINTENANCE**

If the cutting mechanism strikes any foreign object or if your machine should start making an unusual noise or vibrating, stop the engine, disconnect spark plug wire from the spark plug. Allow the engine to cool before:

- (a) Inspect for obvious damage.
- (b) Check for loose parts and tighten to assure continued safe operation.
- (c) Replace or repair any damaged parts.
- (1) The engine governor setting on your machine must not be altered, changed or tampered with. The governor controls the maximum safe operating speeds and protects the engine and all moving parts from damage caused by overspeed.
- (2) Do not operate engine if air cleaner or cover directly over carburetor air intake is removed, except for adjustment. Removal of such parts could create a fire hazard.
- (3) Do not use flammable solutions to clean the air filter.

#### LUBRICATION OF THE ENGINE

Check engine oil level regularly—WHILE THE UNIT IS IN THE UPRIGHT POSITION. Check the oil every five hours of operation and before each usage. Stop engine and wait several minutes before checking oil level. With engine level, the oil must be even with the oil fill (refer to Figure 4). Change oil after the first five hours of operation and every 25 hours thereafter. Refer to the Briggs & Stratton engine manual enclosed with this unit for additional information on your engine.

I

NOTE: ONLY CHECK OIL LEVEL WHEN UNIT IS IN THE UPRIGHT POSITION.

#### REMOVING THE SCREEN

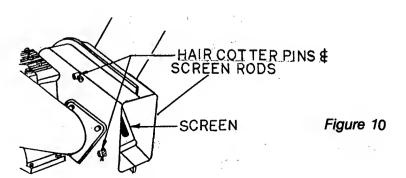
If the discharge area becomes clogged, remove the screen and clean area as follows.

Stop the engine, make certain the leaf shredder-chipper has come to a complete stop and disconnect spark plug wire from the spark plug before unclogging the chute.

Remove two hitch pins from the screen rods which extend through the housing. Remove the clevis pins. Lift the screen from inside the housing. See figure 10.

Clean the screen by scraping or washing with water. Reinstall the screen.

NOTE: Be certain to reassemble the screen with the rolled tubes facing out as shown in figure 10.



#### SHARPENING OR REPLACING CHIPPER KNIFE

Disconnect spark plug wire and move it away from spark plug.

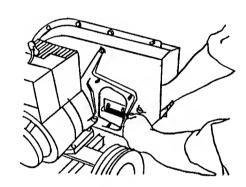
Remove the screen as instructed in previous section.

Remove the chipper chute by removing three hex nuts and washers. A 1/2" wrench is required. See figure 10.

Rotate the rotor assembly by hand until you locate the chipper knife in the chipper chute opening. Remove the knife using a 3/16" allen wrench on the outside of the knife and 1/2" wrench on the rotor assembly (inside the housing). See figure 11. For added convenience, you can remove the rubber discharge cover.

Replace or sharpen knife. If sharpening, care must be exercised to maintain the correct bevel and a straight cutting edge.

Figure 11



Make certain knife is reassembled with the sharp edge facing the direction shown in figure 11 (sharp edge is assembled toward the slotted opening in the rotor assembly).

#### SHARPENING OR REPLACING TRI-LOBE BLADE

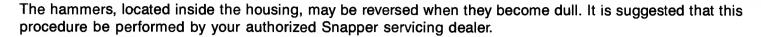
The tri-lobe blade may be removed for sharpening or replacement as follows:

- (1) Remove the screen as per instructions in previous section.
- (2) Tilt housing up on front bumper. Remove the hopper assembly by removing four nuts.
- (3) Prevent the rotor assembly from moving by jamming it with 2' piece of 2" x 4" inserted through the discharge opening.
- (4) With a 9/16" wrench, remove the blade by removing the center bolt, lock washer and retaining washer. It's a good idea to wear gloves. The tri-lobe blade is very sharp.

NOTE: Use caution when removing the blade to avoid contacting the weld bolts on the housing.

(5) When sharpening the blade, follow the original angle of grind as a guide. It is extremely important that each cutting edge receives an equal amount of grinding to prevent an unbalanced blade. An unbalanced blade will cause excessive vibration when rotating at high speeds and may cause damage to the unit.

#### **HAMMERS**



#### **ENGINE SPEED**

Your engine speed has been factory set. Do not attempt to increase engine speed, or it may result in personal injury. If you believe the engine is running too fast or too slow, take your leaf shredder-chipper to the nearest authorized Snapper servicing dealer.

#### SERVICE RECOMMENDATIONS

SERVICE RECORD  Fill in dates as you complete regular service.	SCHEDULE						SERVICE DATES				
	First 5 Hours	Before Each Use	Every 25 Hours	Every 50 Hours	Begin- ning Each Season	Before Storage					
Check Fuel		_									
Drain Fuel						-	-				
Check Engine Oil Level		-			~						
Change Engine Oil	1		1								
Service Air Cleaner			~								
Clean Engine Cylinder Fins			-		~						
Replace or Clean Spark Plug				-		-					
Spark Arrester Muffler				-							

The Service Recommendations Chart is supplied to assist the operator in proper maintenance of the leaf shredder-chipper.

#### **CLEANING**

The leaf shredder-chipper may be cleaned by running water from a hose through the hopper assembly and chipper chute with the engine running. Allow to dry thoroughly.

Wash the bag periodically with water. Allow to dry thoroughly in the shade. Do not use heat.

#### **STORAGE**

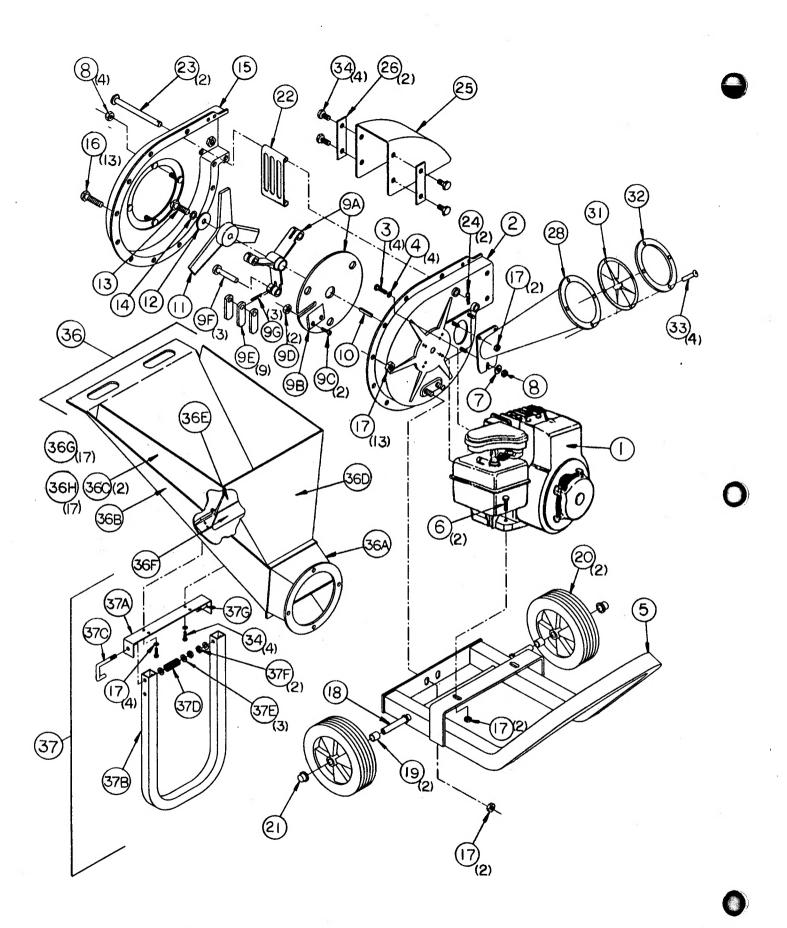
Never store your leaf shredder-chipper indoors or in an enclosed, poorly ventilated areas if gasoline remains in the tank. Fumes may reach an open flame, spark or pilot light from a furnace, water heater, clothes dryer, cigarette, etc.

When not in use, your leaf shredder-chipper should be stored out of reach of children with the spark plug wire removed. For long periods of storage (over winter) gasoline stabilizer (i.e. stabil) should be added to fuel tank and engine should be run for a short time to circulate additive through carburetor. Fuel should then be drained from the fuel tank. Always allow the engine to cool before storing or covering.

#### TROUBLE SHOOTING

PROBLEM	POSSIBLE CAUSE(S)	CORRECTIVE ACTION			
Engine fails to start	<ol> <li>Fuel tank empty, or stale fuel.</li> <li>Spark plug wire disconnected.</li> <li>Faulty spark plug.</li> </ol>	<ol> <li>Fill tank with clean, fresh fuel.</li> <li>Connect wire to spark plug.</li> <li>Clean, adjust gap or replace.</li> </ol>			
Loss of power; operation erratic	<ol> <li>Spark plug wire loose.</li> <li>Unit running on CHOKE.</li> <li>Blocked fuel line or stale fuel.</li> <li>Water or dirt in fuel system.</li> <li>Carburetor out of adjustment.</li> <li>Dirty air cleaner.</li> </ol>	<ol> <li>Connect and tighten spark plug wire.</li> <li>Move choke lever to OFF position.</li> <li>Clean fuel line; fill tank with clean, fresh gasoline.</li> <li>Disconnect fuel line at carburetor to drain fuel tank.         Refill with fresh fuel.</li> <li>Adjust carburetor or contact your authorized Snapper Servicing Dealer.</li> <li>Clean or replace air filter.</li> </ol>			
Engine overheats	<ol> <li>Carburetor not adjusted properly.</li> <li>Engine oil level low.</li> </ol>	<ol> <li>Adjust carburetor or contact your authorized Snapper Servicing Dealer.</li> <li>Fill crankcase with proper oil.</li> </ol>			
Too much vibration	Loose parts or damaged assembly impeller.	Stop engine immediately and disconnect spark plug wire. Tighten all bolts and nuts. Make all necessary repairs. If vibration continues, have unit serviced by a authorized Snapper Servicing Dealer.			
Unit does not discharge  1. Discharge chute clogged.  2. Foreign object lodged in rotor.		<ol> <li>Stop engine immediately and disconnect spark plug wire. Clean screen and inside of shredder housing. See MAINTENANCE section of this manual.</li> <li>Stop engine immediately and disconnect spark plug wire. Remove lodged object.</li> </ol>			

NOTE: For repairs beyond the minor adjustments listed above, please contact your authorized Snapper Servicing Dealer.



## **LS5000 PARTS LIST**

Item No.	Part No.	Quantity	Description
_	804-0003	1	5 H.P. Engine
1 2	804-0004	i	Housing Weldment, Engine Side
3	090-0408	4	5/16-24 x 3/4" HHCS, GR5, Pltd.
4	090-0394	4	5/16 Med. Split Lockwasher, Pltd.
5	804-0025	1	Bumper Weldment
6	090-0090	2	5/16-18 x 1-1/2" HHCS, GR5, Pldt.
7	090-0233	1	5/16 Flatwasher, Pltd.
8	090-0460	5	5/16-18 Nylon Insert Locknut, Pltd.
9	804-0008	1	Shredder Rotor Assembly (includes 9A through 9G)
9A	804-0009	i	Shredder Flywheel
9B	804-0016	i	Chipper Knife
9C	090-0413	2	5/16-18 x 1" Flat Hd. Socket Cap Screw
9D	090-0460	2	5/16-18 Nylon Insert Locknut Pltd.
9E	804-0015	9	Hammer
9F	804-0019	3	Hammer Rod
9G	090-0454	3	1/8" Dia. x 1" Lg. Roll Pin
10	703-0424	1	1/4" x 1/4" x 2" Lg. Shaft Key
11	804-0017	i	Tri-Lobed Blade
12	804-0018	i	Retaining Washer
13	090-0452	1	3/8-24 x 2" Lg. HHCS, GR8, Blk.
14	090-0228	i	3/8 Med. split Lockwasher, Pltd.
15	804-0005	i	Housing Weldment, Hopper Side
16	090-0067	13	5/16-18 x 5/8" HHCS, GR5, Pltd.
17	090-0418	23	5/16-18 Whiz Lock Nut, Pltd.
18	804-0020	1	Axle
19	500-0074	4	Axle Spacer
20	804-0022	2	Wheels 10" Dia. x 1-3/4" Wide
21	090-0457	2	Push Nut Cap 5/8" Dia. Shaft
22	804-0023	1	Shredder Screen
23	804-0024	2	Screen Rod
24	706-0924	2	Hair Cotter Pin
25	804-0051	1	Discharge Cover
26	804-0055	2	Strap
28	804-0029	<u>1</u>	Chipper Chute Weldment
31	804-0033	1	Chipper Chute Cover
32	804-0031P	1	Mounting Flange
33	080-0061	4	3/16" x .402 Alum Pop Rivet
34	090-0066	12	5/16-18 x 3/4" HHCS
36	804-0002	1	Hopper Assembly (includes 36A through 36H)
36A	804-0035	1	Hopper Nose Weldment
36B	804-0041	1	Hopper Base
36C	804-0042	2	Hopper Sides
36D	804-0043	1	Hopper Front
36E	804-0044	1	Hopper Baffle
36F	804-0045	1	Hopper Blowback Shield
36G	090-0469	20	1/4-20 x 1/2" HHCS, Blk.
36H	090-0453	20	1/4-20 Whiz Lock Nut
36J	500-0024	4	5/16-18 x 3/4" HHCS, GR5, BLK
37	804-0046	1	Kick Stand Assembly (includes 37A through 37G)
37A	804-0047	1	Bracket
37B	804-0048	1	Leg Stand
37C	804-0049	1	J-Bolt
37D	804-0050	1	Spring
37E	090-0234	3	3/8" Flatwasher, Pltd.
37F	090-0461	2	3/8"-16 Nylon Insert Locknut, Pltd.
37G	090-0114	1	3/8-16 x 2" HHCS, GR5, Pltd.
38	705-0079	1	Nylon Knit Bag

#### LIMITED WARRANTY

This Snapper product found, in the judgment of Snapper to be defective in material or workmanship, will be repaired or replaced by an Authorized Snapper Service Dealer without charge for parts and labor.

The Snapper product including any defective part must be returned to an Authorized Service Dealer within the warranty period. The expense of delivering the product to the dealer for warranty work and the expense of returning it back to the owner after repair or replacement will be borne by the owner. Snapper's responsibility is limited to making the required repairs or replacements only. No claim of breach of warranty shall be cause for cancellation or rescission of the sales contract of any Snapper product. Proof of purchase will be required by the dealer to substantiate any warranty claim. All warranty work must be performed by an Authorized Service Dealer.

This warranty is limited to five years from the date of original retail purchase for any Snapper product that is used for consumer purposes or 90 days for commercial and rental use.

This warranty does not cover any product that has been subject to misuse, abuse, neglect, negligence, or accident, or that has been operated in any way contrary to or inconsistent with the operating instructions as specified in the owner's manual. The warranty does not apply to any damage to the product that is the result of improper maintenance, or to any product or parts that have not been assembled or installed as specified in the owner's manual.

The warranty does not cover any product that has been altered or modified. In addition, the warranty does not extend to repairs made necessary by normal wear, or by the use of parts or accessories which, in the judgment of Snapper are either incompatible with Snapper products or adversely affect its operation, performance or durability. This warranty does not cover engines, electric starters, batteries, and tires which are warranted separately by their manufacturer and for a different period of time.

Snapper reserves the right to change the design of any product without assuming any obligation to modify any product previously manufactured.

THE DURATION OF THE LIMITED WARRANTY IS FIVE YEARS CONSUMER, 90 DAYS COMMERCIAL AND RENTAL USE. REPAIR OR REPLACEMENT AS PROVIDED UNDER THIS LIMITED WARRANTY IS THE EXCLUSIVE REMEDY OF THE PURCHASER. SNAPPER SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES, EXCEPT THE LIMITED WARRANTY DESCRIBED ABOVE, ALL IMPLIED WARRANTIES (MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE) ARE SPECIFICALLY DISCLAIMED.

SNAPPER ASSUMES NO RESPONSIBILITY FOR INCIDENTAL, CONSEQUENTIAL OR OTHER DAMAGES INCLUDING, BUT NOT LIMITED TO, EXPENSE FOR GASOLINE, OIL, EXPENSE OF DELIVERING THE PRODUCT TO AN AUTHORIZED SERVICE DEALER AND EXPENSE OF RETURNING IT BACK TO THE OWNER, MECHANIC'S TRAVEL TIME, TELEPHONE OR TELEGRAM CHARGES, RENTAL OF A LIKE PRODUCT DURING THE TIME WARRANTY REPAIRS ARE BEING PERFORMED, TRAVEL, LOSS OR DAMAGE TO PERSONAL PROPERTY, LOSS OF REVENUE, LOSS OF USE OF THE PRODUCT, LOSS OF TIME OR INCONVENIENCE.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.